

NCR 19-7740



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D206-642-351
Job Sheet 199552



Part No: D206-642-351

Job Qty: 1 pcs

Part Name: Replacement Skidtube, Low & High Gear, Run-on Landing Wearplates Fits LH or RH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 8/28/19

Job Tracking No:

Due Date: 9/11/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG D4361-041 REV A, IIN-D206-642 REV Q SHEETS 29-30 IPP REV:A NEW ISSUE 12-07-09 JLM
VERIFIED BY:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Skidtubes - 1	1 pcs	9/11/19		0.00	3.26	Skidtubes - 1		TF BE
							Skidtubes - 2		
							Skidtubes - 3		
							Skidtubes - 4		
							Skidtubes - 5		
							Skidtubes - 6		
							Skidtubes - 7		
112	QC 9	1 pcs	9/11/19		0.00	0.00	QC 9 - 10		DAS 24 9-89 SEP 13 2019
							QC 9 - 18		
							QC 9 - 24		
							QC 9 - 43		
							QC 9 - 50		
							QC 9 - 9		
115	QC 5	1 pcs	9/11/19		0.00	0.00	QC 5 - 10		DAS 68 9-89 SEP 13 2019
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
QC 5 - 30									



Container No: S213033



Part: D206-642-351

Job No: 199552

Serial No/Batch: S213033

Revision:

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 09/12/19

Plex 8/28/19 7:30 AM Dart.lajeunesse.marie

120	Handfinish - 1-1 Chemical-B4B	1 pcs	9/11/19	0.00 0.83	QC 5 - 61	
					QC 5 - 81	
					Handfinish - 1 - 1 - B4B	
					Handfinish - 1 - 2 - B4B	
					Handfinish - 1 - 3 - B4B	
					Handfinish - 1 - 4 - B4B	
					Handfinish - 1 - 5 - B4B	
					Handfinish - 1 - 6 - B4B	
					Handfinish - 1 - 7 - B4B	
					Handfinish - 1 - 8 - B4B	
					Handfinish - 1 - 9 - B4B	
					Handfinish - 1 - 10 - B4B	
					Handfinish - 1 - 11 - B4B	
					Handfinish - 1 - 12 - B4B	
					Handfinish - 1 - 13 - B4B	
					Handfinish - 1 - 14 - B4B	
					Handfinish - 1 - 15 - B4B	
					Handfinish - 1 - 16 - B4B	
					Handfinish - 1 - 17 - B4B	
					Handfinish - 1 - 18 - B4B	
					Handfinish - 1 - 19 - B4B	
					Handfinish - 1 - 20 - B4B	
					Handfinish - 1 - 21 - B4B	
					Handfinish - 1 - 22 - B4B	
125	QC 7	1 pcs	9/11/19	0.00 0.00	QC 7 - 10	
					QC 7 - 13	
					QC 7 - 14	
					QC 7 - 15	
					QC 7 - 17	
					QC 7 - 18	
					QC 7 - 19	
					QC 7 - 2	
					QC 7 - 28	
					QC 7 - 3	
					QC 7 - 30	
					QC 7 - 34	
					QC 7 - 36	
					QC 7 - 37	
					QC 7 - 41	
					QC 7 - 47	
					QC 7 - 48	
					QC 7 - 51	
					QC 7 - 58	
					QC 7 - 59	
					QC 7 - 60	
					QC 7 - 9	
					QC 7 - 68	
					QC 7 - 50	

SEP 18 2019

MGA

					QC 7 - 67	
					QC 7 - 40	
					QC 7 - 24	
					QC 7 - 43	
					QC 7 - 61	
					QC 7 - 81	
130	Skidtubes - 2 - B4B	1 pcs	9/11/19	0.00 3.26	Skidtubes - 1 - B4B	
					Skidtubes - 2 - B4B	
					Skidtubes - 3 - B4B	
					Skidtubes - 4 - B4B	TF
					Skidtubes - 5 - B4B	
					Skidtubes - 6 - B4B	
					Skidtubes - 7 - B4B	
140	QC 5	1 pcs	9/11/19	0.00 0.00	QC 5 - 10	
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	BE
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
150	Skidtubes - 2 - B4B	1 pcs	9/11/19	0.00 3.26 40min TF 54min TF 30min TF 2HRS	Skidtubes - 1 - B4B	
					Skidtubes - 2 - B4B	
					Skidtubes - 3 - B4B	
					Skidtubes - 4 - B4B	TF
					Skidtubes - 5 - B4B	BE
					Skidtubes - 6 - B4B	
					Skidtubes - 7 - B4B	
170	QC 10	1 pcs	9/11/19	0.00 0.00	QC 10 - 10	
					QC 10 - 18	
					QC 10 - 24	
					QC 10 - 43	
					QC 10 - 50	
					QC 10 - 58	
					QC 10 - 9	
180	QC 5	1 pcs	9/11/19	0.00 0.00	QC 5 - 10	
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	

					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
190	Handfinish - 2-1 Pressure- B4B	1 pcs	9/11/19	0.00 0.50	Handfinish - 2 - 1 - B4B	BEB 19-10-21
					Handfinish - 2 - 2 - B4B	
					Handfinish - 2 - 3 - B4B	
					Handfinish - 2 - 4 - B4B	
200	Powdercoat - 1 White GI(A)- B4B	1 pcs	9/11/19	0.00 0.23	Powdercoat - 1 - B4B	
					Powdercoat - 2 - B4B	
					Powdercoat - 3 - B4B	BL 19-10-21
					Powdercoat - 4 - B4B	
210	QC 3	1 pcs	9/11/19	0.00 0.00	QC 3 - 10	
					QC 3 - 13	
					QC 3 - 15	
					QC 3 - 17	
					QC 3 - 18	
					QC 3 - 2	
					QC 3 - 28	
					QC 3 - 3	
					QC 3 - 30	
					QC 3 - 34	
					QC 3 - 36	
					QC 3 - 41	
					QC 3 - 51	
					QC 3 - 58	
					QC 3 - 59	BEB 19-10-22
					QC 3 - 68	
					QC 3 - 9	
					QC 3 - 40	
					QC 3 - 19	
					QC 3 - 43	
					QC 3 - 24	
					QC 3 - 61	
					QC 3 - 81	
220	Handfinish - 4-1-Assembly- B4B	1 pcs	9/11/19	0.00 0.83	Handfinish - 4 - 1 - B4B	
					Handfinish - 4 - 10 - B4B	BEB 19-10-30
					Handfinish - 4 - 11 - B4B	
					Handfinish - 4 - 12 - B4B	
					Handfinish - 4 - 13 - B4B	
					Handfinish - 4 - 14 - B4B	
					Handfinish - 4 - 15 - B4B	
					Handfinish - 4 - 2 - B4B	
					Handfinish - 4 - 3 - B4B	
					Handfinish - 4 - 4 - B4B	
					Handfinish - 4 - 5 - B4B	
					Handfinish - 4 - 6 - B4B	
					Handfinish - 4 - 7 - B4B	
					Handfinish - 4 - 8 - B4B	
					Handfinish - 4 - 9 - B4B	
230	QC 3	1 pcs	9/11/19	0.00 0.00	QC 3 - 10	
					QC 3 - 13	

					QC 3 - 15	
					QC 3 - 17	
					QC 3 - 18	
					QC 3 - 2	
					QC 3 - 28	
					QC 3 - 3	
					QC 3 - 30	
					QC 3 - 34	
					QC 3 - 36	
					QC 3 - 41	
					QC 3 - 51	
					QC 3 - 58	
					QC 3 - 59	
					QC 3 - 68	
					QC 3 - 9	
					QC 3 - 40	
					QC 3 - 19	
					QC 3 - 43	
					QC 3 - 24	
					QC 3 - 61	
					QC 3 - 81	
240	QC 5	1	9/11/19	0.00 0.00	QC 5 - 10	
		pcs			QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
250	Packaging 3-1 - Stock - B4B	1	9/11/19	0.00 0.00	Packaging 3 - 1 - B4B	
		pcs			Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	

OCT 30 2019
DAS 40
9-89

OCT 30 2019
DAS 40
9-89

				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	DAS
				Packaging 3 - 26 - B4B	78
				Packaging 3 - 27 - B4B	9-89
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	DAS
				Packaging 3 - 36 - B4B	21
255 DC - 1 - B4B	1	9/11/19	0.00 0.00	DC - 1 - B4B	9-39
	pcs			DC - 2 - B4B	
260 QC 21 - FG	1	9/11/19	0.00 0.00	QC 21 - FG - 21	DAS
	pcs			QC 21 - FG - 70	21
				QC 21 - SA - 53	9-39

OCT 3 1 2019

OCT 3 1 2019

OCT 3 1 2019

Part Op 110 - Skidtubes-2 (Skidtubes) 1-Deburr Fwd edge of tube 2-Remove ridge on inside of Fwd edge of tube as per Dwg D4361 3-Weld Fwd Cap as per Dwg D4361 Use aluminum rod. Grind D2647 to fit as required. 5-Cut aft end to length as per dwg D4361 6-Drill pilot holes using drill Jig DT8168A and DT8168B and DT8025. Most Fwd wearplate hole to be laid out manually. 8-Open Aft Cap Hole using # Drill Bit 9-Open holes for Tow Ring to Ø0.625" as per Dwg D4361, D4361-041 Drilling Detail 10-Remove inner indexing ridge on aft end of skidtubes as per Dwg D4361 11-Deburr and Blow out all chips form inside the tube

115 - QC5 (QC5- Inspect part completeness to step on W/O)

120 - HandFinish1 (Chemical Conversion Coat per QSI005 4.1)

125 - QC7-1 (QC7-Inspect Chemical Conversion Coat)

130 - Skidtubes-2 (Skidtubes) 1-Open holes to finished size as per Dwg D4361, D4361-041 Drilling Detail 2-Countersink crossbolt spacer holes as per Dwg D4361 3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer. 4-Bond D2654-5 web in place as per QSI 015, Ensure holes line up. Allow 12 Hrs. cure time

140 - QC5 (QC5- Inspect part completeness to step on W/O)

150 - Skidtubes-2 (Skidtubes) 1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D4361. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod. 2-Grind welds flush as per Dwg D4361. 3-Counterbore 5/16" x 0.750" deep as per Dwg D4361. Deburr 4- Install nut plate as per dwg

170 - QC10 (QC10- Inspect visual per QSI004- ground welds)

180 - QC5 (QC5- Inspect part completeness to step on W/O)

190 - HandFinish2 (Pressure Wash per QSI005 4.3/ Clean and remove all markings)AND ALODINE ONLY AS PER QSI005

200 - Powdercoat1 (White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum) Make sure Nut Plate Thread is protected using paint screw, and mask GHW studs.

210 - QC3 (QC3- Inspect Part Finish)

220 - HandFinish4 (Assemble as per dwg) 1-Install wearplates as per dwg D4361. 2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D4361. Clean excess adhesive 6-Wing Walk as per Dwg D4361-041 and QSI 005 4.4

230 - QC3 (QC3- Inspect Part Finish)

240 - QC5 (QC5- Inspect part completeness to step on W/O)

250 - Packaging3-1 (Identify as per dwg & Stock Location: _____ Identify and pack for shipping as per PPP D206-642-351

255 - DC (Document Control)Photocopy bluefile and create labels per PPP D206-642-351 CHG001

260 - QC21 (QC21- Final Inspection - Work Order Release)

S. K. Fleck
S200625
exp 07.25.20

A/K 30989/13901

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2620	Skidtube, 206 Skidtube	1 pcs (1 ea)	110-Skidtubes - 1	5189572
D2647	Cap	1 pcs (1 ea)	110-Skidtubes - 1	5166098
D2654-5	Web	1 pcs (1 ea)	130-Skidtubes - 2 - B4B	5173849
D2649	Cross Bolt Spacer	23 pcs (23 ea)	150-Skidtubes - 2 - B4B	5214176
AN3-36A	Bolt	9 Ea (9 ea)	220-Handfinish - 4-1-Assembly-B4B	2506266/7528142
CCR264SS3-3	Cherry Rivet	2 Ea (2 ea)	220-Handfinish - 4-1-Assembly-B4B	5099573
CR3212-4-3	Cherry Rivet	2 Ea (2 ea)	220-Handfinish - 4-1-Assembly-B4B	5163230-3
D2646	Aft Cap	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5160602
D2651-1	Plug	4 pcs (4 ea)	220-Handfinish - 4-1-Assembly-B4B	5196044
D2651-3	O-Ring	4 pcs (4 ea)	220-Handfinish - 4-1-Assembly-B4B	5180320
D2680-041	Nut Plate	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5197646
D3873-1	Bushing	18 pcs (18 ea)	220-Handfinish - 4-1-Assembly-B4B	5215514
D4364-041*	Run-on Landing Wearplate Fwd	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	* 5163894
D4364-043*	Run-on Landing Wearplate Aft	1 pcs (1 ea)	220-Handfinish - 4-1-Assembly-B4B	* 5213100
MS21042-3	Nut use MS21042L3 per QSI 017	9 Ea (9 ea)	220-Handfinish - 4-1-Assembly-B4B	5160258
MS27039-1-08	Screw	2 Ea (2 ea)	220-Handfinish - 4-1-Assembly-B4B	5162897
MS27039-4-06	Screw	1 Ea (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5166974-3
NAS1149C0332R	Washer (AN960C10L)	9 Ea (9 ea)	220-Handfinish - 4-1-Assembly-B4B	5218154
NAS1149D0332J	Washer	2 Ea (2 ea)	220-Handfinish - 4-1-Assembly-B4B	5178378
NAS1149D0463J	Washer	1 Ea (1 ea)	220-Handfinish - 4-1-Assembly-B4B	5158585

M. U. 012541

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Skidtubes - 1	D2620	1	1	0
130-Skidtubes - 2 - B4B	D2647	1	26	0
150-Skidtubes - 2 - B4B	D2654-5	1	8	0
220-Handfinish - 4-1-Assembly-B4B	D2649	23	31	0
	AN3-36A	9	59	0
	CCR264SS3-3	2	71	0
	CR3212-4-3	2	140	0
	D2646	1	62	0
	D2651-1	4	305	0
	D2651-3	4	723	0
	D2680-041	1	29	0
	D3873-1	18	100	0
	D4364-041	1	5	0
	D4364-043	1	0	0
	MS21042-3	9	466	0
	MS27039-1-08	2	425	0
	MS27039-4-06	1	86	0
	NAS1149C0332R	9	1,884	0
	NAS1149D0332J	2	2,339	0
	NAS1149D0463J	1	3,790	0

Part Specifications

Specifications could not be found.

Plex 8/28/19 7:30 AM Dart.lajeunesse.marie

QTY -041	QTY -043	PART NUMBER	DESCRIPTION
X		D4361-041	SKIDTUBE ASSY
	X	D4361-043	SKIDTUBE ASSY
1	1	D2600-1-160	EXTRUSION
1		D2654-5	WEB
	1	D2654-7	WEB
1	1	D2646	AFT CAP
1	1	D2647	CAP
23	26	D2649	CROSS BOLT SPACER
4	8	D2651-1	PLUG
4	8	D2651-3	O-RING
1	1	D2680-041	NUT PLATE
18	20	D3873-1	BUSHING
1		D4364-041	FWD WEARPLATE ASSY
1		D4364-043	AFT WEARPLATE ASSY
	1	D4366-041	FWD WEARPLATE ASSY
	1	D4366-043	AFT WEARPLATE ASSY
9	10	AN3-36A	BOLT
9	10	NAS1149C0332R	WASHER (OR AN960C10L)
9	10	MS21042-3	NUT
2	2	NAS1149D0332J	WASHER (OR AN960JD10L)
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	MS27039-1-08	SCREW
1	1	MS27039-4-06	SCREW
1	1	NAS1149D0463J	WASHER (OR AN960JD416)

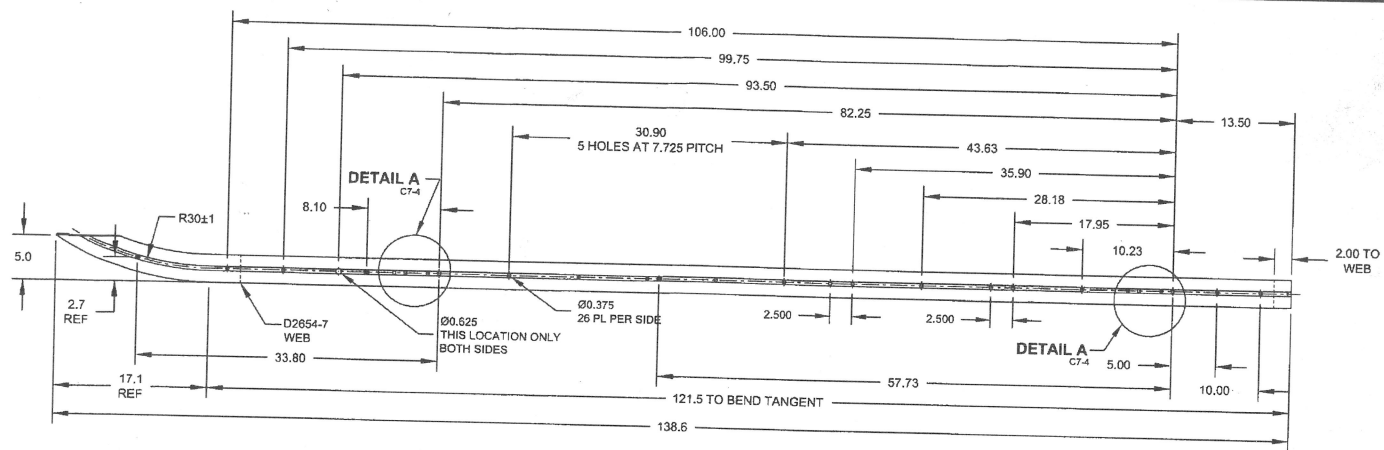
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2654-5/-7 WEB
-POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D4361-041 = 37.5 LBS
D4361-043 = 44.3 LBS
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE.
A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

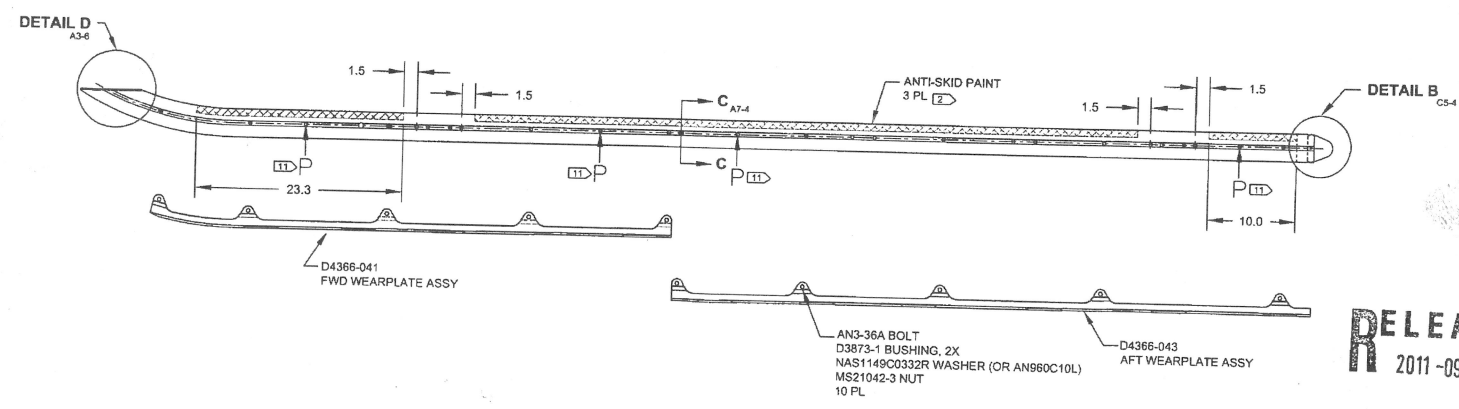
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 199552 MLC
19-08-28

RELEASED
2011-09-12

A		NEW ISSUE		SC	11.05.05
REV.		DESCRIPTION		BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC			
DRAWN	SC	PORT HADLOCK, WA			
CHECKED	9	DRAWING NO.		REV. A	
MFG. APPR.	9	D4361		SHEET 1 OF 4	
APPROVED	9	TITLE		SCALE	
DE APPR.	9	206L/407 SKIDTUBE ASSEMBLIES		NTS	
DATE	11.05.05				
COPYRIGHT © 2011 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.					



D4361-043 BENDING/DRILL DETAIL



D4361-043 ASSEMBLY/FINISHING DETAIL

RELEASED
2011-09-12

DESIGN	SC	DART AEROSPACE USA, INC	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	97	DRAWING NO.	REV. A
MFG. APPR.	8	D4361	SHEET 3 OF 4
APPROVED	140	TITLE	SCALE
DE APPR.	14	206L/407 SKIDTUBE ASSEMBLIES	NTS
DATE	11.05.05	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

Entered: LLDate: Nov 19/19

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. 19-7740Route update only ☐

Job: <u>199552</u> Part No. <u>P200-642-351</u>		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☒ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☒ Water Jet ☐ Supplier ☐ Quality ☐																															
Date: <u>19/9/9</u>		Sequence #: <u>150</u>		QTY Affected: <u>①</u>		MRB (QSI042) <u>1NSP</u> <u>12</u> <u>19/9/9</u>																													
Description Work Order Deviation				Disposition		Completed By <u>JW</u> <u>19-9-9</u>																													
Tow-ring hole is $\phi 0.625$, which is too small for tow-ring.				Acceptable to drill $\phi 0.640$. Ref. D3274 Rev. G.		Lead hand / Supervisor <u>JW</u> <u>19-9-9</u>																													
						QC / QA Coordinator <u>DAS</u> <u>9</u> <u>19-11-05</u>																													
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☒ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY <table border="0"><tr><td>☐ Pressure/Forced</td><td>☐ Contamination</td><td>☐ Power Loss/Surge</td><td>☐ Positioned Wrong</td></tr><tr><td>☐ Bending</td><td>☐ Misaligned/off center</td><td>☐ Folio/Program</td><td>☐ Outside Tolerance</td></tr><tr><td>☐ Crushing</td><td>☐ BOM/Route</td><td>☐ Grain Direction</td><td>☒ Drawing</td></tr><tr><td>☐ Cracks</td><td>☐ Broken/Damage/Defect</td><td>☐ Weld</td><td>☐ Finish</td></tr><tr><td>☐ Crimp/Kink/Ripple/Wave/Twist</td><td>☐ Incomplete/Unclear Instructions</td><td>☐ Wrong Stock Pulled</td><td>☐ Part Lost/Missing</td></tr><tr><td>☐ Marks/Chatter</td><td>☐ Drill Holes</td><td>☐ Out of Sequence</td><td>☐ Misread</td></tr><tr><td>☐ Mislabeled</td><td>☐ Fit/Function</td><td>☐ Off-set/Set-up</td><td></td></tr></table>						☐ Pressure/Forced	☐ Contamination	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Misaligned/off center	☐ Folio/Program	☐ Outside Tolerance	☐ Crushing	☐ BOM/Route	☐ Grain Direction	☒ Drawing	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Finish	☐ Crimp/Kink/Ripple/Wave/Twist	☐ Incomplete/Unclear Instructions	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Marks/Chatter	☐ Drill Holes	☐ Out of Sequence	☐ Misread	☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up	
☐ Pressure/Forced	☐ Contamination	☐ Power Loss/Surge	☐ Positioned Wrong																																
☐ Bending	☐ Misaligned/off center	☐ Folio/Program	☐ Outside Tolerance																																
☐ Crushing	☐ BOM/Route	☐ Grain Direction	☒ Drawing																																
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Finish																																
☐ Crimp/Kink/Ripple/Wave/Twist	☐ Incomplete/Unclear Instructions	☐ Wrong Stock Pulled	☐ Part Lost/Missing																																
☐ Marks/Chatter	☐ Drill Holes	☐ Out of Sequence	☐ Misread																																
☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up																																	
Other/Details:																																			